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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/987,264	11/14/2001	Takehiro Ikeda	216062US2	6839

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OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

QUINONES, ISMAEL C

ART UNIT	PAPER NUMBER
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2686

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DATE MAILED: 04/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/987,264

Applicant(s)

IKEDA ET AL.

Examiner

Ismael Quiñones

Art Unit

2686

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-3 is/are allowed.
- 6) ☒ Claim(s) 4-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on September 14, 2001 has being considered by the examiner and made of record in the application file.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

3. The abstract of the disclosure is objected to because:

In lines 2 and 8, the applicant uses a dash for indicating separation between the identification numbers used (i.e. 2-1-2-3), the applicant should use the appropriate symbols or perhaps words to separate the nomenclature employed for representing the base stations (i.e. 2-1 through 2-3, 2.1-2.3, etc.). Correction is required. See MPEP § 608.01(b).

4. The disclosure is objected to because of the following informalities:

In Page 2, Paragraphs 48, 52; Page 3, Paragraphs 58, 59, 61, 63, and 65, the applicant uses a dash for indicating separation between the identification numbers used for referencing to those base stations shown in Figs. 1A and 2A (i.e. 2-1-2-3), the applicant should use the appropriate symbols or perhaps words to separate the

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nomenclature employed for representing the base stations (i.e. 2-1 through 2-3, 2.1-2.3, etc.). Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. **Claims 4-5** are rejected under 35 U.S.C. 102(e) as being anticipated by Ghosh et al. (U.S. Pat. No. 6,678,523).

Regarding **claim 4**, Ghosh et al. disclose a retransmission control apparatus in a base station (A base station that receives frames transmitted from a mobile station, and wherein the structure of the frames comprise a cyclic redundancy check bit (CRC) which indicates whether there are any errors in the frame, and based upon the CRC a determination for retransmission is made; *col. 3, line 67 thru col. 4, line 13; col. 4, lines 49-53*), comprising: a part receiving a signal sent from a mobile station (Wherein the base station establishes communication over both Forward and Reverse Traffic Channels; *col. 1, lines 29-32*); a part performing error judgment for said signal sent from said mobile station (Wherein the base stations communicating to the mobile station decodes those frames sent by the mobile station, for further determining if the frame contains any errors or otherwise; *col. 4, lines 19-23 and lines 36-44; col. 6, lines 22-23 and 34-36*); a part obtaining results of error judgment of said base station and other base stations (Wherein

the mobile station obtains results of error judgment such as ACK/NACK responses from those base station to which it is communicating over; *col. 3, lines 26-30; col. 4, lines 19-23; col. 6, lines 22-26*); a part sending a response which indicates that retransmission is not required to said mobile station when said results includes a result indicating no error (Wherein if none or at least one of the base stations communicates that a frame does not contain any errors, retransmission for that frame is not required; *col. 4, lines 27-33; col. 4, line 45 thru col. 5, line 6; col. 5, lines 30-63*); and a part sending a response which indicates that retransmission is required to said mobile station when every result in said results indicates that there is an error (Wherein if all those base stations establishing communication with the mobile station decode a frame sent by said mobile station in error, the mobile station retransmit said frame to those base stations; *col. 4, lines 23-27 and line 40; col. 5, lines 7-29*).

Regarding **claim 5**, Ghosh et al. disclose a retransmission control apparatus in a base station, comprising (A base station that receives frames transmitted from a mobile station, and wherein the structure of the frames comprise a cyclic redundancy check bit (CRC) which indicates whether there are any errors in the frame, and based upon the CRC a determination for retransmission is made; *col. 3, line 67 thru col. 4, line 13; col. 4, lines 49-53*); a part receiving a signal sent from a mobile station; a part performing error judgment for said signal sent from said mobile station (Wherein the base station establishes communication over both Forward and Reverse Traffic Channels; *col. 1, lines 29-32*); a part exchanging results of said error judgment with other base stations (Wherein the base stations exchange their error judgment results by transmitting the

frames to a Radio Network Controller (RNC), the RNC choosing the frame with the highest quality; *col. 3, lines 56-58; col. 5, line 64 thru col. 6, line 1; col. 6, lines 16-18*); a part returning a first response which indicates that retransmission is not required to said mobile station when results of said error judgment of said base station and said other base stations include a result indicating no error (Wherein if none or at least one of the base stations communicates that a frame does not contain any errors, retransmission for that frame is not required; *col. 4, lines 27-33; col. 4, line 45 thru col. 5, line 6; col. 5, lines 30-63*); and a part returning a second response which indicates that retransmission is required to said mobile station when every result of said error judgment of said base station and said other base stations indicates that there is an error (Wherein if all those base stations establishing communication with the mobile station decode a frame sent by said mobile station in error, the mobile station retransmit said frame to those base stations; *col. 4, lines 23-27 and line 40; col. 5, lines 7-29*).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. **Claims 6** is rejected under 35 U.S.C. 103(a) as being unpatentable over Ghosh et al. (U.S. Pat. No. 6,678,523) in view of Kumar et al. (U.S. Pat. No. 6,507,572).

Regarding **claim 6**, and as applied to claim 5, Ghosh et al. disclose the aforementioned retransmission control apparatus. Ghosh et al. fail to clearly specify wherein said first response or said second response is sent to said mobile station when a received signal power level of said signal in said base station is larger than any received signal power level in said other base stations.

In the same field of endeavor, Kumar et al. disclose a mechanism for transferring control for sending a response such as forward-link data to the base station ("leg") transmitting the stronger pilot signal (*col. 6, lines 40-55 and lines 64-66; col. 11, lines 24-37*).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have Ghosh et al. retransmission control apparatus employing base stations for returning a error judgment response to transmit a error judgment response through a base station transmitting the stronger pilot signal as taught by Kumar et al. for the purpose of forwarding all transmission data through only one base station.

Allowable Subject Matter

10. The following is an Examiner's statement of reasons for allowance:

Consider **claims 1 and 2**, the prior art of record fails to teach, disclose, or suggest a retransmission control method comprising the steps of: base stations receiving a signal sent from a mobile station; each of said base stations performing error judgment for said signal sent from said mobile station; said base stations exchanging results of said error judgment with one another; a corresponding base station of a communication partner of said mobile station obtaining results of error judgment of said corresponding base station and other base stations; said corresponding base station sending a response which indicates that retransmission is not required to said mobile station when said results includes a result indicating no error; and said corresponding base station returning a response which indicates that retransmission is required to said mobile station when every result in said results indicates that there is an error.

The best prior art found during the prosecution of the present application, Ghosh et al. (U.S. Pat. No. 6,678,523) disclose to teach, or suggest base stations receiving a signal sent from a mobile station; each of said base stations performing error judgment for said signal sent from said mobile station; said base stations exchanging results of said error judgment with one another; base stations sending a response which indicates that retransmission is not required to said mobile station when said results includes a result indicating no error; and said corresponding base station returning a response which

indicates that retransmission is required to said mobile station when every result in said results indicates that there is an error.

Ghosh et al. (U.S. Pat. No. 6,678,523) fail to specifically teach, disclose or suggest a corresponding base station of a communication partner of said mobile station obtaining results of error judgment of said corresponding base station and other base stations.

Any comments considered necessary by Applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance".

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
 - a. Toskala et al. (U.S. Pat. No. 6,678,249), Physical Layer Packet Retransmission Handling WCDMA in Soft Handover.
12. Any response to this Office Action should be **faxed to** (703) 872-9306 or **mailed to:**

Commissioner of Patents and Trademarks

P.O. Box 1450

Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Crystal Park II
2021 Crystal Drive
Arlington, VA 22202
Sixth Floor (Receptionist)

13. Any inquiry concerning this communication on earlier communications from the Examiner should be directed to Ismael Quiñones whose telephone number is (703) 305-8997. The Examiner can normally be reached on Monday-Friday from 8:00am to 5:00pm.

14. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Marsha D. Banks-Harold can be reached on (703) 305-4379, and fax number is (703) 746-9818. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9301.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose number is (703) 305-4700 or call customer service at (703) 306-0377.

Ismael Quiñones

I.Q.

April 8, 2004

Marsha D Banks-Harold

MARSHA D. BANKS-HAROLD
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